Notice of Allowability	Application No.	Applicant(s)
	09/693,351	DING ET AL.
	Examiner	Art Unit
	Paulos M. Natnael	2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *amendment received 4/4/05*.

2. ☒ The allowed claim(s) is/are *1-2,5-6,8-12,14,16-17,19-21,23-24 , renumbered as 1-17*.

3. ☒ The drawings filed on *10/20/00* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some*   c)☐ None of the:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

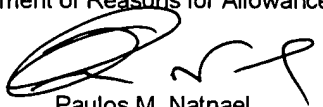   * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a)☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

      1)☐ hereto or 2)☐ to Paper No./Mail Date _____ .

    (b)☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

    Paper No./Mail Date _____ .

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

Paulos M. Natnael
Primary Examiner
Art Unit: 2614

DETAILED ACTION

Allowable Subject Matter

1.   Claims **1,2,5,6,8-12,14,16,17,19,20,21,23,24** are allowed.

2.   The following is an examiner's statement of reasons for allowance: the prior art

fails to disclose claim 1 (as amended) comprising navigation unit operative to isolate an

input video signal, a decoder operative to separate said input video signal into a plurality

of frames, each frame containing a series of fields, a processing unit responsive to said

indication of said processing type entry for providing a filtered video frame from a

corresponding one of said plurality of frames for display on a progressive display

device, a detection unit having means for generating a look-up table from substantially

all of said plurality of frames prior to processing said plurality of frames for display, said

look-up table a processing types associated with a corresponding one of said plurality of

frames, said plurality of processing types including a null processing type corresponding

to no predetermined processing type associated with said corresponding frame, said

detection unit further having means for providing an indication of said processing type

entry corresponding to said each frame from said look-up table; and, a detection module

having means for generating a look-up table prior to processing said plurality of frames

for display, said look-up table including a processing type associated with a

corresponding one of said plurality of frames, said detection unit further having means

for providing an indication of said processing type entry corresponding to said each

frame from said look-up table, said detection module further including means for user

selection of processing type for said each video frame, said user selection overriding

said processing type entry thereof, a processing module responsive to said indication of

said processing type entry for providing a filtered video frame for display on a

progressive display device, said filtered video frame processed in accordance with one

of said processing type entry and said user selection of processing type, as in claim **8;**

Obtaining current video information from an input video signal, separating said

input video signal into plurality of video frames, a detecting if each said video frame

matches an entry in predetermined table, for specifying a processing type, generating a

look-up table having a plurality of processing type entries prior to processing said

plurality of video frames. each of said processing type entries respectively storing an

indication of a processing algorithm for processing field data of a corresponding one of

said plurality of video frames; retrieving one of said plurality of processing type entries

corresponding to one of said plurality of video frame frames prior to the display thereof;

processing said one of said video frames in accordance with said processing algorithm

indicated by said corresponding processing type entry, <u>selectively overriding said</u>

<u>processing type entry in said look-up table for any of said plurality of video frames with a</u>

<u>user selection of processing type,</u> as in amended claim **12;**

separating a video image frame into its component fields where a first one of

said component fields is associated with a display time preceding that of a second one

of said component fields each of said component fields including a plurality of pixel

lines, determining which of said component fields is said first component field, <u>where</u>

<u>said first component field is associated with a display time preceding that of a second</u>

component field; selecting one of said first component field and said second

component field of said video image frame for processing to a filtered video frame,

setting pixel values of a first pixel line of said filtered video frame to a first pixel line of

said component field selected in step (c), setting pixel values of second pixel line of said

filtered video frame to said first one of said plurality of pixel lines of said component field

selected in step (c) if said selected component field is said second component field,

(f) generating a pixel line having pixel values equal to an average of corresponding

pixels in each adjacent pair of pixel lines of said selected component field, inserting said

generated pixel line between said corresponding adjacent pair of pixel lines of said

filtered video frame except said first pixel line and except said second pixel line if said

selected component field is said second component field, as in amended claim **14**;

a detection unit having means for generating a look-up table from

substantially all of said plurality of frames prior to processing any one of said

plurality of frames for display, said look-up table having entered therein one of a

plurality of processing types associated with a corresponding one of said plurality

of frames, said detection unit further having means for providing an indication of

said processing type entry corresponding to said each frame from said look-up

table; and a processing unit operative to execute a processing algorithm on said series

of fields of said corresponding frame in accordance with said indication of said

processing type entry and providing thereby for display on a progressive display

device a filtered video frame corresponding one of said plurality of frames, as in new

claim **23**;

A video signal processing method, comprising the steps of: obtaining current video information from an input video signal, separating said input video signal into a plurality of video frames; generating a look-up table from substantially all of said plurality of video frames prior to processing any one of said plurality of video frames for display, said look-up table having entered therein one of a plurality of processing type entries, each of said processing type entries respectively storing an indication of a processing algorithm for processing field data of a corresponding one of said plurality of video frames; retrieving, successively, one of said plurality of processing type entries corresponding to each of said plurality of video frames prior to the display thereof; and processing said field data of said one of said video frames in accordance with said processing algorithm indicated by said corresponding processing type entry. a processing unit operative to execute a processing algorithm on said series of fields of said corresponding frame in accordance with said indication of said processing type entry and providing thereby for display on a progressive display device a filtered video frame corresponding one of said plurality of frames, as in new claim **24**.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Paulos M. Natnael whose telephone number is (571)

272-7354. The examiner can normally be reached on 10:00am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Miller can be reached on (571)272-7353. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Paulos M. Natnael
Primary Examiner
Art Unit 2614

June 14, 2005